

## A B S T R A C T

The invention proposes a technique for measuring chromatic dispersion in an optical communication line transmitting an optical signal at a predetermined optical wavelength. The technique comprises determining the sign of chromatic dispersion and includes introducing controlled changes of wavelength around the predetermined wavelength, monitoring the optical signal that has passed said line, and obtaining a first and a second signals, wherein the first signal reflects changes of the carrier wavelength, and the second signal reflects changes of delay of the optical signal transmitted via the line. The two signals are compared and the chromatic dispersion sign is determined based on the phase difference there-between.